WE CLAIM:

1. A multi-stage data logging system comprising:

a) a telecommunications ("telecom") stage receiving input from a plurality of input channels;

b) a recorder stage having one or more recorders, at least one recorder storing data associated with input received from at least one of said plurality of input channels;

c) a distribution stage providing access to data stored in the recorder stage;

d) a first interface linking the telecom and the recorder stages and a second interface linking the recorder and the distribution stages;

wherein at least two stages of the system are physically separable and in operation can be located wide distances apart.

2. The data logging system of claim 1 wherein the telecom stage comprises:

a) a first interface capturing signals from said plurality of input channels;

b) one or more signal processors converting captured signals into data having a predetermined format; and

c) a second interface for transmitting said converted data to said recorder stage.

3. The data logging system of claim 2 wherein the telecom stages further comprises at least one analog to digital signal converter.

3 4. The data logging system of claim 2 wherein said one or more data processors provide data compression.

5. The data logging system of claim 1 wherein the telecom stage provides time stamping of the received input.

6. The data logging system of claim 1 wherein the telecom stage provides authentication of signals from said plurality of input channels.

4 7. The data logging system of claim 2 wherein said one or more data processors encrypt the converted data.

8. The data logging system of claim 1 wherein the recorder stage comprises a controller for directing and monitoring recorder stage operations, and each recorder comprises:

a) a first interface receiving data from the telecom stage;

b) a buffer for transitional data storage;

c) a hard disk drive for data storage; and

d) a second interface for transmitting stored data to the distribution stage.

- 21 -

9.   The data logging system of claim 8 wherein the recorder stage still further comprises an archive storage device for archiving data.

10.   The data logging system of claim 9 wherein said archive storage device is fixed.

11.   The data logging system of claim 9 wherein said archive storage device is a RAID array.

12.   The data logging system of claim 9 wherein said archive storage device is removable.

13.   The data logging system of claim 1 wherein the distribution stage comprises:
        a) a first interface receiving data from the recorder stage;
        b) a controller for directing and monitoring distribution stage operations;
        c) a buffer for transitional data storage; and
        d) a second interface for distributing data to one or more output channels.

14.   The data logging system of claim 1 wherein the distribution stage comprises an archive storage device for archiving data.

15.   The data logging system of claim 14 wherein said archive storage device is fixed.

16.   The data logging system of claim 14 wherein said archive storage device is a RAID array.

17.   The data logging system of claim 14 wherein said archive storage device is removable.

18.   The data logging system of claim 1 wherein the distribution stage comprises: an operating system software application and a computer capable of running said software application and accessing one or more remote server computers.

19.   The data logging system of claim 18 wherein said computer is connected to said one or more remote server computers via a local area network.

20.   The data logging system of claim 18 wherein said computer is connected to said one or more remote server computers via an Internet protocol (I/P) network.

21.   The data logging system of claim 1 wherein the recorder stage comprises at least one backup recorder, and the system further comprises means for detecting a malfunction in a recorder of the recorder stage, and means for automatically switching interface links from the detected malfunctioning recorder to said at least one backup recorder.

22.   The data logging system of claim 1 wherein at least one of said first and second interfaces is network-based.

- 22 -

23. The data logging system of claim 1 wherein at least one of said first and second interfaces is a four-wire interface.

24. A multi-stage data logging system comprising:

a) a first means for receiving signals from one or more input channels;

b) a second means for recording data associated with received signals;

c) a third means for retrieving stored data and distributing retrieved data to one or more output channels;

wherein at least two of said first, second, and third means are physically separable and can operate wide distances apart.

25. The data logging system of claim 24 further comprising an archive storage device for archiving data from said one or more input channels.

26. The data logging system of claim 24 wherein received signals from said one or more input channels is voice, and the second means further comprises means for recording call information about the received voice signals.

27. A data logger, comprising:

a telecommunication device receiving input from a plurality of data sources;

a processor converting input from said plurality of data sources to one or more data formats;

a memory for storing converted data corresponding to the received input from said plurality of data sources;

a communication path; and

a server transferring stored data from one or more of said plurality of data sources via the communication path to at least one remote user.

28. The data logger of claim 27 wherein the server is a Web server and the communication path is the Internet.

29. A method for accessing information in at least one digital logger storing data associated with input from a plurality of input channels, comprising:

at a Web server having access to said at least one digital logger, receiving a request for retrieval of stored data from a client;

retrieving stored data in accordance with the received request; and

transferring the retrieved data to the client.

30. The method of claim 29 wherein the step of retrieving stored data comprises accessing a record of an input channel made by said at least one digital logger.

- 23 -

NY2 - 923894.1

31.   The method of claim 30 wherein the step of retrieving stored data comprises accessing call information for a record of an input channel made by said at least one digital logger.

32.   The method of claim 30 wherein the step of retrieving stored data comprises providing direct access to a record of an input channel stored in said at least one digital logger.

33.   The method of claim 29 wherein the step of retrieving stored data comprises causing a process to access data stored in said at least one digital logger through a common gate interface.

34.   The method of claim 29 wherein the step of retrieving stored data comprises accessing archived data at the Web server corresponding to a record of an input channel made by said at least one digital logger.

35.   A method for operating a multi-stage data logging system having: a telecom stage receiving input from a plurality of input channels; a recorder stage having two or more recorders, at least one recorder storing data associated with input received from the plurality of input channels and at least one backup recorder; a distribution stage providing access to data stored in the recorder stage; and a first interface linking the telecom and said one or more recorders of the recorder stages and a second interface linking the recorder and the distribution stages; the method comprising:

detecting a malfunctioning recorder in the recorder stage;

automatically switching interface links from the detected malfunctioning recorder to said backup recorder to ensure uninterrupted operation of the system; and

without disrupting the operation of the system replacing the detected malfunctioning recorder with a functioning recorder.

36.   A method for increasing the recording capacity of an operating multi-stage data logging system having: a telecom stage having telecom blocks capturing input from at most N input channels; a recorder stage having one or more recorders, said recorders having maximum recording capacity of M (M ≤ N) channels; a distribution stage providing access to data stored in the recorder stage; a first network-based or four-wire-based interface linking the telecom and the recorder stages; and a second interface linking the recorder and the distribution stages; the method comprising:

(a) without disrupting the operation of the system attaching to said first interface at least one recorder so that the combined capacity of the recorders in the recorder stage is equal to or exceeds N channels.

- 24 -

37

34. The method of claim 33 further comprising:

(b) without disrupting the operation of the system, attaching to said first interface at least one additional telecom block so that the system can capture $P > N$ input channels; and

(c) repeating step (a) until the combined capacity of the recorders in the recorder

5   stage is equal to or exceeds P channels.